5

10

ABSTRACT

A hydrogen storage material which is an AB₅ type hydrogen storage alloy having a CaCu₅ type crystal structure represented by general formula:

 $MmNi_aMn_bAl_cCo_d$

wherein Mm is a misch metal, $4.1 < a \le 4.3$, $0.4 < b \le 0.6$, $0.2 \le c \le 0.4$, $0.1 \le d \le 0.4$, and $5.2 \le a + b + c + d \le 5.45$,

or general formula:

 $MmNi_aMn_bAl_cCo_dX_e$

wherein Mm is a misch metal, X is Cu and/or Fe, $4.1 < a \le 4.3$, $0.4 < b \le 0.6$, $0.2 \le c \le 0.4$, $0.1 \le d \le 0.4$, $0.6 \le 0.1$, and $0.2 \le a + b + c + d + e \le 5.45$,

characterized in that the lattice length on the c-axis is 406.2 pm or more, and a process of producing the same.

BEST AVAILABLE COTY